

## Supplemental Material

### Criteria used to evaluate eligibility of studies for inclusion in the meta-regression

Table 1 includes six evaluation criteria that were used to assess the quality of the studies that were potentially eligible for inclusion in the benzene-leukemia meta-regression. Justification and application of the criteria were discussed in detail in a previous publication(Vlaanderen et al. 2008).

**Table 1:** Evaluation criteria

| <b>Criteria</b>                                                                           | <b>Possible outcome</b> | <b>Required outcome</b> |
|-------------------------------------------------------------------------------------------|-------------------------|-------------------------|
| 1 Is the study design case-control, cohort or cross-sectional?                            | Yes / no                | yes                     |
| 2 Is exposure expressed on a ratio scale and specific for the agent of interest?          | Yes / no                | yes                     |
| 3 Is a detailed description of the statistical analysis provided?                         | Yes / no                | yes                     |
| 4 Are criteria for inclusion of subjects into the study described with sufficient detail? | Yes / no                | yes                     |
| 5 Is the assessment of the health effect performed according to recognized norms?         | Yes / no                | yes                     |
| 6 Are all known potential strong confounding factors considered in the study design?      | Yes / no                | yes                     |

### Reference:

Vlaanderen J, Vermeulen R, Heederik D, Kromhout H. 2008. Guidelines to evaluate human observational studies for quantitative risk assessment. *Environ Health Perspect* 116(12):1700-1705.